Attention:

BP Naperville Campus Attn: James Saylor 150 West Warrenville Road (601-1NE) Naperville, Illinois 60563

State of Illinois

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Source:

BP Naperville Campus 150 West Warrenville Road MC 601 1NE Naperville, Illinois 60563

I.D. No.: 043065AAG Permit No.: 95120161

Permitting Authority:

Illinois Environmental Protection Agency Bureau of Air, Permit Section 217/785-1705

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Type of Application: Renewal

Purpose of Application: Renew Existing CAAPP Permit for 5 Years

<u>ID No.</u>: 043065AAG Permit No.: 95120161

Statement of Basis No.: 95120161-1408

Date Issued: TBD
Expiration Date: TBD

Renewal Submittal Date: 9 Months Prior to TBD

Source Name: BP Naperville Campus

Address: 150 West Warrenville Road MC 601 1NE City: Naperville

City: Naperville
County: DuPage
ZIP Code: 60563

This permit is hereby granted to the above-designated source authorizing operation in accordance with this CAAPP permit, pursuant to the above referenced application. This source is subject to the conditions contained herein. For further information on the source see Section 1 and for further discussion on the effectiveness of this permit see Condition 2.3(g).

If you have any questions concerning this permit, please contact Rosario Johnstone at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MTR:RJ:psj

cc: IEPA, Permit Section
IEPA, FOS, Region 1
Lotus Notes Database

Section		Table of Contents	Page
1	Source	e Information	3
	1.1	Addresses	
	1.2	Contacts	
	1.3	Single Source	
2	Gener	al Permit Requirements	4
	2.1	Prohibitions	
	2.2	Emergency Provisions	
	2.3	General Provisions	
	2.4	Testing	
	2.5	Recordkeeping	
	2.6	Certification	
	2.7	Permit Shield	
	2.8	Title I Conditions	
	2.9	Reopening and Revising Permit	
	2.10	Emissions Trading Programs	
	2.11	Permit Renewal	
	2.12	Permanent Shutdown	
	2.13	Startup, Shutdown, and Malfunction	
3	Source	e Requirements	12
	3.1	Applicable Requirements	
	3.2	Applicable Plans and Programs	
	3.3	Title I Requirements	
	3.4	Synthetic Minor Limits	
	3.5	Reporting Requirements	
4	Emiss	ion Unit Requirements	16
-	4.1	Pilot-Scale Process Units and Associated 700 Tank Farm	_*
	4.2	Soil Vapor Extraction System	
	4.3	Cogeneration Plant - Natural Gas Fired Turbine	
	4.4	Cogeneration Plant - Natural Gas Fired Duct Burner	
	4.5	Four Natural Gas Fired Boilers	
5	Addit	ional Title I Requirements	42
J	5.1	Construction Permits	
	.	eificet Behinibie Beneiment	44
6	_	nificant Activities Requirements	44
	6.1 6.2	Insignificant Activities Subject to Specific Regulations	
	6.3	Insignificant Activities in 35 IAC 201.210(a)	
		Insignificant Activities in 35 IAC 201.210(b)	
	6.4 6.5	Applicable Requirements Compliance Method	
	6.6	Notification Requirements for Insignificant Activities	
	0.0	Notification Requirements for insignificant Activities	
7		Requirements	48
	7.1	Testing	
	7.2	Emissions Reduction Market System (ERMS) Requirements	
	7.3	40 CFR 60 Subpart A Requirements (NSPS)	
	7.4	Malfunction Breakdown Requirements	
8		Only Requirements	55
	8.1	Permitted Emissions for Fees	
	8.2	NO _x RACT Requirements	
Attachme	ent 1	List of Emission Units at This Source	58
Attachme		Acronyms and Abbreviations	59
Attachme	ent 3	Contact and Reporting Addresses	61
Attachme	ent 4	Example Certification by a Responsible Official	62

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 1 - Source Information

1. Addresses

Source

BP Naperville Campus 150 West Warrenville Road Naperville, Illinois 60563

Operator

BP Products North America Inc. 150 West Warrenville Road (601-1NE) Naperville, Illinois 60563

Owner

AMOCO Research Operating Company 150 West Warrenville Road (601-1NE) Naperville, Illinois 60563

Permittee

The Owner and Operator of the source as identified in this table.

2. Contacts

Certified Officials

The source shall submit an Administrative Permit Amendment for any change in the Certified Officials, pursuant to Section 39.5(13) of the Act.

	Name	Title
Responsible Official	Barbara Bibbs	CAFO Facilities Director
Delegated	N/A	N/A
Authority	IV/ A	N/A

Other Contacts

	Name	Phone No.	Email
Source Contact	James Saylor	630-420-4874	James.Saylor@bp.com
Technical Contact	James Saylor	630-420-4874	James.Saylor@bp.com
Correspondence	James Saylor	630-420-4874	James.Saylor@bp.com
Billing	James Saylor	630-420-4874	James.Saylor@bp.com

3. Single Source

The source identified in Condition 1.1 above shall be defined to include all the following additional source(s):

I.D. No.	Permit No.	Single Source Name and Address
N/A	N/A	N/A

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 2 - General Permit Requirements

1. Prohibitions

- a. It shall be unlawful for any person to violate any terms or conditions of this permit issued under Section 39.5 of the Act, to operate the CAAPP source except in compliance with this permit issued by the IEPA under Section 39.5 of the Act or to violate any other applicable requirements. All terms and conditions of this permit issued under Section 39.5 of the Act are enforceable by USEPA and citizens under the Clean Air Act, except those, if any, that are specifically designated as not being federally enforceable in this permit pursuant to Section 39.5(7)(m) of the Act. [Section 39.5(6)(a) of the Act]
- After the applicable CAAPP permit or renewal application submittal date, as specified in h. Section 39.5(5) of the Act, the source shall not operate this CAAPP source without a CAAPP permit unless the complete CAAPP permit or renewal application for such source has been timely submitted to the IEPA. [Section 39.5(6)(b) of the Act]
- No Owner or Operator of the CAAPP source shall cause or threaten or allow the continued c. operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations applicable to the source, unless this CAAPP permit granted to the source provides for such operation consistent with the Act and applicable Illinois Pollution Control Board regulations. [Section 39.5(6)(c) of the Act]
- Pursuant to Section 39.5(7)(g) of the Act, emissions from the source are not allowed to d. exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder, consistent with Section 39.5(17) of the Act and applicable requirements, if any.

2. **Emergency Provisions**

Pursuant to Section 39.5(7)(k) of the Act, the Owner or Operator of the CAAPP source may provide an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations under this CAAPP permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

- i. An emergency occurred and the source can identify the cause(s) of the emergency.
 - The source was at the time being properly operated.
 - The source submitted notice of the emergency to the IEPA within 2 working days of iii. the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
 - During the period of the emergency the source took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or requirements in this permit.
- For purposes of Section 39.5(7)(k) of the Act, "emergency" means any situation arising h. from sudden and reasonably unforeseeable events beyond the control of the source, such as an act of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operation error.
- In any enforcement proceeding, the source seeking to establish the occurrence of an С. emergency has the burden of proof. This provision is in addition to any emergency or

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

upset provision contained in any applicable requirement. This provision does not relieve the source of any reporting obligations under existing federal or state laws or regulations.

3. General Provisions

Duty to Comply

The source must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Actl

b. Need to Halt or Reduce Activity is not a Defense

It shall not be a defense for the source in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

Duty to Maintain Equipment c.

The source shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements. [Section 39.5(7)(a) of the Act]

d. Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under. [Section 39.5(7)(a) of the Act]

Duty to Pay Fees e.

- The source must pay fees to the IEPA consistent with the fee schedule approved i. pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act]
- The IEPA shall assess annual fees based on the allowable emissions of all regulated ii. air pollutants, except for those regulated air pollutants excluded in Section 39.5(18)(f) of the Act and insignificant activities in Section 6, at the source during the term of this permit. The amount of such fee shall be based on the information supplied by the applicant in its complete CAAPP permit application. [Section 39.5(18)(a)(ii)(A) of the Act]
- The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois EPA, P.O. Box 19276, Springfield, IL, 62794-9276. Include on the check: ID #, Permit #, and "CAAPP Operating Permit Fees". [Section 39.5(18)(e) of the Actl

f. Obligation to Allow IEPA Surveillance

Pursuant to Sections 4(a), 39.5(7)(a), and 39.5(7)(p)(ii) of the Act, inspection and entry requirements that necessitate that, upon presentation of credentials and other documents as may be required by law and in accordance with constitutional limitations, the source shall allow the IEPA, or an authorized representative to perform the following:

Enter upon the source's premises where the emission unit(s) are located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

BP Naperville Campus I.D. No.: 043065AAG

Date Received: 02/16/2007 Permit No.: 95120161 Date Issued: TBD

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
- iv. Sample or monitor any substances or parameters at any location at reasonable times:
 - A. As authorized by the Clean Air Act or the Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or
 - B. As otherwise authorized by the Act.
- v. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

g. Effect of Permit

- i. Pursuant to Section 39.5(7)(j)(iv) of the Act, nothing in this CAAPP permit shall alter or affect the following:
 - A. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section.
 - B. The liability of the Owner or Operator of the source for any violation of applicable requirements prior to or at the time of permit issuance.
 - C. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act.
 - D. The ability of USEPA to obtain information from the source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.
- ii. Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Sections 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. [35 IAC 201.122 and Section 39.5(7)(a) of the Act]

h. <u>Severability Clause</u>

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the source shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

4. Testing

a. Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

any tests conducted as required by this permit or as the result of a request by the IEPA shall be submitted as specified in Condition 7.1 of this permit. [35 IAC Part 201 Subpart J and Section 39.5(7)(a) of the Act]

- b. Pursuant to Section 4(b) of the Act and 35 IAC 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator: The IEPA may require the Owner or Operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the IEPA, at such reasonable times as may be specified by the IEPA and at the expense of the Owner or Operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The IEPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the IEPA: The IEPA shall have the right to conduct such tests at any time at its own expense. Upon request of the IEPA, the Owner or Operator of the emission source or air pollution control equipment shall provide, without charge to the IEPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

5. Recordkeeping

a. Control Equipment Maintenance Records

Pursuant to Section 39.5(7)(b) of the Act, a maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates maintenance was performed and the nature of preventative maintenance activities.

b. Retention of Records

- i. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]
- ii. Pursuant to Section 39.5(7)(a) of the Act, other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a different period is specified by a particular permit provision.

c. Availability of Records

- i. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall retrieve and provide paper copies, or as electronic media, any records retained in an electronic format (e.g., computer) in response to an IEPA or USEPA request during the course of a source inspection.
- ii. Pursuant to Section 39.5(7)(a) of the Act, upon written request by the IEPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the IEPA. For this purpose, material shall be submitted to the IEPA within 30 days unless additional time is provided by the IEPA or the Permittee believes that the volume and nature of

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 2.9(d))

6. Certification

a. Compliance Certification

- i. Pursuant to Section 39.5(7)(p)(v)(C) of the Act, the source shall submit annual compliance certifications by May 1 unless a different date is specified by an applicable requirement or by a particular permit condition. The annual compliance certifications shall include the following:
 - A. The identification of each term or condition of this permit that is the basis of the certification.
 - B. The compliance status.
 - C. Whether compliance was continuous or intermittent.
 - D. The method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- ii. Pursuant to Section 39.5(7)(p)(v)(D) of the Act, all compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the IEPA Compliance Section. Addresses are included in Attachment 3.
- iii. Pursuant to Section 39.5(7)(p)(i) of the Act, all compliance reports required to be submitted shall include a certification in accordance with Condition 2.6(b).

b. Certification by a Responsible Official

Any document (including reports) required to be submitted by this permit shall contain a certification by the responsible official of the source that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included in Attachment 4 of this permit.

7. Permit Shield

- a. Pursuant to Section 39.5(7)(j) of the Act, except as provided in Condition 2.7(b) below, the source has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the IEPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit. This permit shield does not extend to applicable requirements which are promulgated after Error! Bookmark not defined. (date USEPA notice started), unless this permit has been modified to reflect such new requirements.
- b. Pursuant to Section 39.5(7)(j) of the Act, this permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

Pursuant to Section 39.5(7)(a) of the Act, the issuance of this permit by the IEPA does c. not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the IEPA or the USEPA may have against the applicant including, but not limited to, any enforcement action authorized pursuant to the provision of applicable federal and state law.

8. Title I Conditions

Pursuant to Sections 39(a), 39(f), and 39.5(7)(a) of the Act, as generally identified below, this CAAPP permit may contain certain conditions that relate to requirements arising from the construction or modification of emission units at this source. These requirements derive from permitting programs authorized under Title I of the Clean Air Act (CAA) and regulations thereunder, and Title X of the Illinois Environmental Protection Act (Act) and regulations implementing the same. Such requirements, including the New Source Review programs for both major (i.e., PSD and nonattainment areas) and minor sources, are implemented by the IEPA.

- This permit may contain conditions that reflect requirements originally established in construction permits previously issued for this source. These conditions include requirements from preconstruction permits issued pursuant to regulations approved or promulgated by USEPA under Title I of the CAA, as well as requirements contained within construction permits issued pursuant to state law authority under Title X of the Act. Accordingly, all such conditions are incorporated into this CAAPP permit by virtue of being either an "applicable Clean Air Act requirement" or an "applicable requirement" in accordance with Section 39.5 of the Act. These conditions are identifiable herein by a designation to their origin of authority.
- This permit may contain conditions that reflect necessary revisions to requirements b. established for this source in preconstruction permits previously issued under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIR".
 - Revisions to original Title I permit conditions are incorporated into this permit i. through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
 - ii. Revised Title I permit conditions shall remain in effect through this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.
- This permit may contain conditions that reflect new requirements for this source that c. would ordinarily derive from a preconstruction permit established under the authority of Title I of the CAA. These conditions are specifically designated herein as "TIN".
 - The incorporation of new Title I requirements into this CAAPP permit is authorized through the combined legal authority of Title I of the CAA and Title X of the Act. Public participation requirements and appeal rights shall be governed by Section 39.5 of the Act.
 - Any Title I conditions that are newly incorporated shall remain in effect through ii. this CAAPP permit, and are therefore enforceable under the same, so long as such conditions do not expire as a result of a failure to timely submit a complete renewal application or are not removed at the applicant's request.

BP Naperville Campus I.D. No.: 043065AAG

Date Received: 02/16/2007 Permit No.: 95120161 Date Issued: TBD

9. Reopening and Revising Permit

a. Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the source for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

b. Reopening and Revision

Pursuant to Section 39.5(15)(a) of the Act, this permit must be reopened and revised if any of the following occur:

- i. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- ii. Additional requirements become applicable to the source for acid deposition under the acid rain program;
- iii. The IEPA or USEPA determines that this permit contains a material mistake or that an inaccurate statement was made in establishing the emission standards or limitations, or other terms or conditions of this permit; or
- iv. The IEPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

c. <u>Inaccurate Application</u>

Pursuant to Sections 39.5(5)(e) and (i) of the Act, the IEPA has issued this permit based upon the information submitted by the source in the permit application referenced on page 1 of this permit. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation or reopening of this CAAPP under Section 39.5(15) of the Act.

d. Duty to Provide Information

The source shall furnish to the IEPA, within a reasonable time specified by the IEPA any information that the IEPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the source shall also furnish to the IEPA copies of records required to be kept by this permit. [Section 39.5(7)(o)(v) of the Act]

10. Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

11. Permit Renewal

a. Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of the most recent issued CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(1) and (0) of the Act]

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

b. For purposes of permit renewal, a timely application is one that is submitted no less than 9 months prior to the date of permit expiration. [Section 39.5(5)(n) of the Act]

12. Permanent Shutdown

Pursuant to Section 39.5(7)(a) of the Act, this permit only covers emission units and control equipment while physically present at the source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

13. Startup, Shutdown, and Malfunction

Pursuant to Section 39.5(7)(a) of the Act, in the event of an action to enforce the terms or conditions of this permit, this permit does not prohibit a Permittee from invoking any affirmative defense that is provided by the applicable law or rule.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 3 - Source Requirements

1. Applicable Requirements

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

a. Fugitive Particulate Matter

i. Pursuant to 35 IAC 212.301 and 35 IAC 212.314, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source unless the wind speed is greater than 25 mph.

ii. Compliance Method (Fugitive Particulate Matter)

Upon request by the IEPA, the Permittee shall conduct observations at the property line of the source for visible emissions of fugitive particular matter from the source to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request, observations shall begin either within one day or three days of receipt of a written request from the IEPA, depending, respectively, upon whether observations will be conducted by employees of the Permittee or a third-party observer hired by the Permittee to conduct observations on its behalf. The Permittee shall keep records for these observations, including identity of the observer, the date and time of observations, the location(s) from which observations were made, and duration of any fugitive emissions event(s).

b. Emissions Reduction Market System (ERMS)

Pursuant to 35 IAC Part 205, ERMS seasonal emissions of VOM during the seasonal allotment period from May 1 through September 30 shall not exceed 10 tons. The Permittee shall comply with all applicable requirements in Section 7.2 of this permit.

c. Ozone Depleting Substances

Pursuant to 40 CFR 82.150(b), the Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart F of 40 CFR Part 82:

- i. Pursuant to 40 CFR 82.156, persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices.
- ii. Pursuant to 40 CFR 82.158, equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment.
- iii. Pursuant to 40 CFR 82.161, persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program.
- iv. Pursuant to 40 CFR 82 Subpart B, any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner shall comply with 40 CFR 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

Pursuant to 40 CFR 82.166, all persons shall comply with the reporting and v. recordkeeping requirements of 40 CFR 82.166.

d. Asbestos Demolition and Renovation

- Asbestos Fees. Pursuant to Section 9.13(a) of the Act, for any site for which the i. Owner or Operator must file an original 10-day notice of intent to renovate or demolish pursuant to Condition 3.1(d)(ii) below and 40 CFR 61.145(b), the owner or operator shall pay to the IEPA with the filing of each 10-day notice a fee of \$150.
- Pursuant to 40 CFR 61 Subpart M, Standard of Asbestos, prior to any demolition or ii. renovation at this facility, the Permittee shall fulfill notification requirements of 40 CFR 61.145(b).
- Pursuant to 40 CFR 61.145(c), during demolition or renovation, the Permittee shall comply with the procedures for asbestos emission control established by 40 CFR 61.145(c).

Future Emission Standards e.

Pursuant to Section 39.5(15)(a) of the Act, this source shall comply with any new or revised applicable future standards of 40 CFR 60, 61, 62, or 63; or 35 IAC Subtitle B after the date issued of this permit. The Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 2.6(a). This permit may also have to be revised or reopened to address such new regulations in accordance to Condition 2.9.

2. Applicable Plans and Programs

Pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act, the Permittee shall comply with the following applicable requirements. These requirements are applicable to all emission units (including insignificant activities unless specified otherwise in this Section) at the source.

Fugitive PM Operating Program a.

Should this source become subject to 35 IAC 212.302, the Permittee shall prepare and operate under a Fugitive PM Operating Program consistent with 35 IAC 212.310 and submitted to the IEPA for its review. The Fugitive PM Operating Program shall be designed to significantly reduce fugitive particulate matter emissions, pursuant to 35 IAC 212.309(a). Any future Fugitive PM Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the Fugitive PM Operating Program is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Fugitive PM Operating Program. In the event that the IEPA notifies the Permittee of a deficiency with any Fugitive PM Operating Program, the Permittee shall be required to revise and resubmit the Fugitive PM Operating Program within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the

b. PM₁₀ Contingency Measure Plan

Should this source become subject to 35 IAC 212.700, then the Permittee shall prepare and operate under a PM_{10} Contingency Measure Plan reflecting the PM_{10} emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall, within 90 days after the date this source becomes subject to 35 IAC 212.700, submit a request to modify this CAAPP permit in order to include a new, appropriate PM_{10} Contingency Measure Plan.

BP Naperville Campus I.D. No.: 043065AAG

Date Received: 02/16/2007 Permit No.: 95120161 Date Issued: TBD

c. Episode Action Plan

Should this source become subject to 35 IAC 244.142, the Permittee shall prepare, submit, and operate under an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures and submitted to the IEPA for its review. The Episode Action Plan shall contain the information specified in 35 IAC 244.144. The Permittee shall immediately implement the appropriate steps described in this Episode Action Plan should an air pollution alert or emergency be declared. Any future Episode Action Plan made by the Permittee during the permit term is automatically incorporated by reference provided the Episode Action Plan is not expressly disapproved, in writing, by the IEPA within 30 days of receipt of the Episode Action Plan. In the event that the IEPA notifies the Permittee of a deficiency with any Episode Action Plan, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency pursuant to Section 39.5(7)(a) of the Act.

d. Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the Permittee shall submit a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or submit a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan, as part of the annual compliance certification required by Condition 2.6(a). This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

3. Title I Requirements

As of the date of issuance of this permit, there are no source-wide Title I requirements that need to be included in this Condition.

4. Synthetic Minor Limits

As of the date of issuance of this permit, there are no source-wide synthetic minor limits that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows:
 - I. Requirements in Conditions 3.1(a)(i).
 - II. Requirements in Conditions 3.2(a), and 3.2(c).
 - III. Requirements in Conditions 3.3(a).
 - B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- A. Date and time of the deviation.
- B. Emission unit(s) and/or operation involved.
- C. The duration of the event.
- D. Probable cause of the deviation.
- E. Corrective actions or preventative measures taken.
- iv. All deviation reports required in this Permit shall be identified, summarized, and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

b. Semiannual Reporting

i. Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit Semiannual Monitoring Reports to the IEPA, Air Compliance Section, summarizing required monitoring as part of the Compliance Methods in this Permit submitted every six months as follows, unless more frequent reporting is required in other parts of this permit.

Monitoring Period
January through June
July through December

Report Due Date
July 31
January 31

ii. The Semiannual Monitoring Report must be certified by a Responsible Official consistent with Condition 2.6(b).

c. Annual Emissions Reporting

Pursuant to 35 IAC Part 254, the Source shall submit an Annual Emission Report to the Air Quality Planning Section, due by May 1 of the year following the calendar year in which the emissions took place. All records and calculations upon which the verified and reported data are based must be retained by the source.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 4 - Emission Unit Requirements

4.1 Pilot - Scale Process Units and Associated 700 Tank Farm

1. Emission Units and Operations

Emission	Units	Pollutants Being Regulated	Original Construction Date	Modificatio n/ Reconstruct ion Date	Air Pollution Control Devices or Measures	Monitoring Devices
Coker Unit AU-71		PM, CO, NO _x , H ₂ S VOM, SO₂	10/2008	None	S-702 and TC-702	Thermocouple
Combi-Cracker AU-74		PM, CO, NO _x , H ₂ S VOM, SO₂	10/2008	None	S-702 and TC-702	None
Product Distillation Unit AU-74A		PM, CO, NO _x , H ₂ S VOM, SO₂	10/2008	None	S-702 and TC-702	None
Deep Cut Distillation Unit AU-75		PM, CO, NO _x , H ₂ S VOM, SO₂	10/2008	None	S-702 and TC-702	None
Catalytic Riser Unit AU-77	Vent Gas Oxidation Gas	PM, CO, NO _x , H ₂ S VOM, SO₂		N/A	S-702 and TC-702 None	None
18 Existing Storage Tanks (T-1 thru T-6, T-8 thru T- 18, T-20)		VOM	1974 05/2007 (T-20)	None	S-702 and TC-702	None

2. Applicable Requirements

For the emission units in Condition 4.1.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.
- ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform visible emissions observations from each individual stack or a common stack in accordance with Method 22 for visible emissions at least semi-annually. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the emission units, maintenance and repair and/or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. Particulate Matter Requirements (PM)

A. Pursuant to Construction Permit #08070032, emissions from each emission unit shall not exceed the following limit: [T1]

<u>Pollutant</u>	(Tons/Yr)
PM	0.44

ii. Compliance Method (PM Requirements)

Monitoring

A. Pursuant to Construction Permit #08070032, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of PM emissions from the emission units with supporting calculations (ton/year).

c. i. Carbon Monoxide Requirements (CO)

A. Pursuant to Construction Permit #08070032, emissions from each emission unit shall not exceed the following limit: [T1]

<u>Pollutant</u>	(Tons/Yr)
CO	0.88

ii. Compliance Method (CO Requirements)

Monitoring

A. Pursuant to Construction Permit #08070032, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall maintain records of CO emissions from the emission units with supporting calculations (ton/year).

d. i. Nitrogen Oxide Requirements (NO_x)

A. Pursuant to Construction Permit #08070032, emissions from each emission unit shall not exceed the following limit: [T1]

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Pollutant	(Tons/Yr)
NO _v	0.88

ii. Compliance Method (NO_x Requirements)

Monitoring

A. Pursuant to Construction Permit #08070032, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total of 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the NO_x , emissions from the emission units including supporting calculations (ton/year).

e. i. <u>Hydrogen sulfide (H₂S)</u>

A. Pursuant to Construction Permit #08070032, emissions from emission unit shall not exceed the following limit: [T1]

<u>Pollutant</u>	(Tons/Yr)	
H ₂ S	0.44	

ii. Compliance Method (H₂S Requirements)

Monitoring

A. Pursuant to Construction Permit #08070032, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of $\rm H_2S$ emissions from the emission units with supporting calculations (tons/year).

f. i. Volatile Organic Material Requirements (VOM)

- A. Pursuant to 35 IAC 218.301, No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of this 35 IAC 218.301 shall apply only to photochemically reactive material.
- B. Pursuant to Construction Permit #08070032, total VOM emission from each emission unit shall not exceed 2 tons/month and 2 tons/year. [T1]
- ii. <u>Compliance Method (VOM Requirements)</u>

Monitoring

A. Pursuant to Section 39.5(7)(a) of the Act, compliance with hourly emission limit of 35 IAC 218.301 shall be determined based on the 30-day average.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Recordkeeping

Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the monthly VOM emissions from the emission units with supporting calculations (lbs/hour, tons/month and tons/year).

Sulfur Dioxide Requirements (SO₂) i. α.

- Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from the thermal oxidizer to exceed 2000 ppm.
- ii. Compliance Method (SO₂ Requirements)

Monitoring

For sufficient periodic monitoring see Condition 4.1.2(h)(ii)(B).

Recordkeeping

Pursuant to Construction Permit #08070032, the Permittee shall maintain the emissions of SO₂ from the emission units (tons/month and tons/year) with supporting calculations and documentation.

i. Operational and Production Requirements h.

- Pursuant to Section 39.5(7)(a) of the Act, and Construction Permit #08070032, pipeline quality natural gas shall be the only fuel fired in the thermal oxidizer or keep on file a document from the gas provider certifying the sulfur content in the supplied natural gas does not exceed 2,000 ppm.
- Pursuant to Construction Permit #08070032, the Permittee shall operate the В. thermal oxidizer in accordance with written procedures that, at a minimum, include the following:
 - Instructions that the thermal oxidizer shall be operated whenever: an affected process unit with the potential to emit greater than 8 lbs/hr of VOM controlled by the oxidizer is in operation, an affected process unit with the potential to emit compounds that may cause a nuisance odor controlled by the oxidizer is in operation, material is being added to a tank, or a tank is storing material with a true vapor pressure of 1.0 psia or more.
 - ii. If the afterburner has not been operated, preheating the oxidizer's combustion chamber to operating temperature prior to beginning operation of unit(s) that vent to the oxidizer.
 - iii. Operation in accordance with the manufacturer's recommendations.
- Compliance Method (Operational and Production Requirements) ii.

Monitoring

- Pursuant to Construction Permit #08070032, the Permittee shall:
 - For the thermal oxidizer, the Permittee shall install, operate and maintain a continuous monitoring device for combustion chamber temperature, which shall be installed, calibrated, and maintained according to vendor's specifications. Measured data shall be

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

- displayed and average hourly temperature shall automatically be recorded.
- ii. For the H_2S scrubber, the Permittee shall install, calibrate, maintain and operate conductivity meter instrumentation for the flow rate of the scrubbant. This data shall be recorded at least once per day while unit(s) is operating. Note that the conductivity shall be used to calculate the pH of the scrubbant

Recordkeeping

- Pursuant to Section 39.5(7)(b), the Permittee shall keep the records that a pipeline natural gas is the only fuel fired or keep on file a document from the gas provider certifying the sulfur content in the supplied natural gas does not exceed 2,000 ppm.
- С. Pursuant to Construction Permit #08070032, the Permittee shall maintain the following records:
 - i. The Permittee shall maintain records for natural gas flows (mscf/hour) to the burner and shall keep a log per manufacturer's recommendations for operation and maintenance.
 - ii. The Permittee shall maintain following records related to operation and emissions of the emission units:
 - The type and throughput of materials stored in the tanks, a. including the maximum true vapor pressure.
 - b. The Permittee shall maintain a file to keep records of monitored data for the thermal oxidizer, and H_2S scrubber for a period of five years.

i. i. Work Practices and Control Requirements

Requirements of 35 IAC Part 218 Subpart B:

- Pursuant to 35 IAC 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gallons, unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108.
- Exception: If no odor nuisance exists the limitations of 35 IAC 218.122(b) shall only apply to the loading of volatile organic liquids with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- C. Pursuant to 39.5(7)(a) of the Act, the tanks shall be equipped with high pressure relief valves, such that breathing losses are negligible for VOM.
- Pursuant to Section 39.5(7)(a) of the Act, the tanks are not allowed to store gasoline.
- Pursuant to Section 39.5(7)(a) of the Act, the annual average vapor pressure of the material stored in the tanks shall not exceed 7.5 psig at the maximum storage temperature.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

ii. Compliance Method (Work Practice Requirements)

Monitoring

A. Pursuant to 39.5(7)(a) of the Act, routine inspections of the tanks shall be conducted once every six months.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed to the tanks along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment being inspected, findings of the inspections, operation and maintenance procedures, and a description of any maintenance and repair activities that resulted in a modification or reconstruction of the piece of equipment.
- C. Pursuant to 35 IAC 218.129(f), the Permittee of each storage vessel specified in 35 IAC 218.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel.
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the type of materials stored in the tanks including the maximum true vapor pressure.
- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the presence of the submerged loading pipe.

3. Non-Applicability Determinations

- a. The tanks are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, 40 CFR Part 63 Subpart BBBBBB, because the tanks do not store any gasoline pursuant to 40 CFR 63.11082.
- b. The tanks are not subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60 Subpart Kb, because the tanks are less than 19,812 gallon pursuant to 40 CFR 60.110b(b).
- c. Pursuant to 35 IAC 218.119(a), the control requirements of 35 IAC 218.120 are not applicable to the tanks because they have a capacity less than 40,000 gallons.
- d. The tanks are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the tanks use passive control measures, such as submerged fill pipe which is not considered control device.
- e. The Pilot- Scale Process Units and 700 Tank Farm are not subject to NSPS 40 CFR 60 Subpart Ja Petroleum Refineries because they are not located at a petroleum refinery but are located at a research campus.

4. Other Requirements

a. Start-up, Shutdown, and Malfunction Breakdown Requirements

- i. Authorization for State Requirements
 - A. Malfunction Breakdown Requirements

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to continue operation in violation of the applicable requirements of Conditions 4.1.2(f)(i)(A) during malfunction breakdown. The Permittee shall comply with all applicable requirements in Section 7.4 of this permit.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.1.2(a)(i) through 4.1.2(i)(i)
 - B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.7(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.7(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

Page 22 of 62

4.2 Soil Vapor Extraction System

1. Emission Units a	nd Operatio	ns			
	Pollutants Being	Original Construction	Modification/ Reconstruction	Air Pollution Control Devices	Monitoring
Emission Units	Regulated	Date	Date	or Measures	Devices
Soil Vapor Extraction System	VOM	TBD	N/A	Carbon absorption system	None

2. Applicable Requirements

For the emission units in Condition 4.2.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.
- ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform visible emissions observations from each individual stack or a common stack in accordance with Method 22 for visible emissions at least semi-annually. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the Soil Vapor Extraction System, maintenance and repair and/or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.
- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. Particulate Matter Requirements (PM)

A. Pursuant to Construction Permit #12010053, emissions from the Soil Vapor Extraction System shall not exceed the following limit: [T1]

<u>Pollutant</u>	(lb/hour)	(Tons/Yr)
PM	0 1	0.44

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

ii. Compliance Method (PM Requirements)

Monitoring

A. Pursuant to Construction Permit #12010053, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of PM emissions from the Soil Vapor Extraction System with supporting calculations (lb/hour and ton/year).

c. i. Carbon Monoxide Requirements (CO)

A. Pursuant to Construction Permit #12010053, emissions from Soil Vapor Extraction System shall not exceed the following limit: [T1]

<u>Pollutant</u>	(lb/hour)	(Tons/Yr)
CO	0.5	1.0

ii. Compliance Method (CO Requirements)

Monitoring

A. Pursuant to Construction Permit #12010053, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of CO emissions from the Soil Vapor Extraction System with supporting calculations (lb/hour and ton/year).

d. i. <u>Nitrogen Oxide Requirements (NO_x)</u>

A. Pursuant to Construction Permit #12010053, NO_x emissions from the Soil Vapor Extraction System shall not exceed the following limit: [T1]

<u>Pollutant</u>	(Lb/hour)	(Tons/Yr)	
NO _v	0.5	1.0	

ii. Compliance Method (NO_x Requirements)

Monitoring

A. Pursuant to Construction Permit #12010053, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total of 12 months of data).

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the NO_x , emissions from the Soil Vapor Extraction System including supporting calculations (lb/hour and ton/year).

e. i. Volatile Organic Material Requirements (VOM)

- A. Pursuant to Construction Permit #12010053, total VOM emission from the Soil Vapor Extraction System shall not exceed 7.9 lb/hour and 2.5 tons/year.
 [T1]
- ii. Compliance Method (VOM Requirements)

Monitoring

B. Pursuant to Construction Permit #12010053, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the monthly VOM emissions from the Soil Vapor Extraction System with supporting calculations (lb/hr, tons/month, and tons/yr).

f. i. Sulfur Dioxide Requirements (SO₂)

A. Pursuant to Construction Permit #12010053, emissions from the Soil Vapor Extraction System shall not exceed the following limit: [T1]

Pollutant	(lb/hour)	(Tons/Yr)	
PM	0.1	0.44	

ii. Compliance Method (SO₂ Requirements)

Monitoring

A. Pursuant to Construction Permit #12010053, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of SO_2 emissions from the Soil Vapor Extraction System with supporting calculations (lbs/hour and tons/year).

g. i. Hazardous Air Pollutants (HAP)

A. Pursuant to Construction Permit #12010053, emissions from the Soil Vapor Extraction System shall not exceed 2.5 tons per year of any single HAP and 2.5 tons per year of any combination of HAPs. [T1]

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

ii. Compliance Method (HAP Requirements)

Monitoring

A. Pursuant to Construction Permit #12010053, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running total 12 months of data).

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of each and combination of HAP emissions from the Soil Vapor Extraction System with supporting calculations (lbs/hour and tons/year).

h. i. Operational and Production Requirements

- A. Pursuant to Construction Permit #12010053, the Permittee shall operate the Soil Vapor Extraction System in accordance with written procedures that, at a minimum, include the following:
 - i. Operation in accordance with the manufacturer's recommendations.
- ii. Compliance Method (Operational and Production Requirements)

Monitoring

- A. Pursuant to Construction Permit #12010053, the permit only authorizes insitu treatment of soils that are only contaminated with volatile and semivolatile organic materials.
- Note: Soils classified as hazardous waste pursuant to Section 3.15 of the Illinois Environmental Protection Act (Act) cannot be treated without written approval from the Illinois EPA, Bureau of Land, including permits in accordance with Section 21(f) of the Act. The Permittee must make the determination that the soil to be treated is non-hazardous using the criteria under 35 IAC 721.111.

Recordkeeping

- A. Pursuant to Construction Permit #12010053, the Permittee shall keep the following records:
 - i. A file containing the manufacturer's specifications for the performance of the carbon adsorption system, percent removal or exhaust concentration for hydrocarbons, and recommended operating and maintenance procedures.
 - ii. Operating hours of the affected system (hours/month); and
 - iii. Amount of soil vapor processed (cubic meters/month).
 - iv. Any unusual occurrences during each malfunction of the system that significantly impairs emission performance, including the nature and duration of the event, corrective actions taken, any deviations from the established procedures for such a malfunction, and preventative actions taken to address similar events.
 - v. Inspection, maintenance and repair log(s) for the system that at a minimum shall identify such activities that are performed related to components that may affect emissions; the reason for such activities,

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD i.e., whether planned or initiated due to a specific event or condition; and any failure to carry out the established maintenance procedures, with explanation.

vi. Records for any period during which the Soil Vapor Extraction System deviated from an applicable requirement.

3. Non-Applicability Determinations

- a. The Soil Vapor Extraction System is not subject to 35 IAC 218.301 or 218.302, (which would require that emissions of organic materials be no more than 8 pounds per hour or be controlled by at least 85 percent) because trichloroethylene is not a photochemically reactive organic material as defined by 35 IAC 218.4690.
- b. The Soil Vapor Extraction System is not subject to 35 IAC Part 218, Subpart TT, the control requirements of 35 IAC 218, Subpart TT, because the Soil Vapor Extraction System meets the exemption of 35 IAC 218.980(d) i.e., actual VOM emissions from the Soil Vapor Extraction System do not exceed 2.5 tons per year
- c. The Soil Vapor Extraction System is not subject to the requirements of 35 IAC 218.105(d) because the affected system does not require the use of the carbon adsorption unit to demonstrate compliance with any requirement in 35 IAC Part 218.
- d. The Soil Vapor Extraction System not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Site Remediation, 40 CFR 63, Subpart GGGGG. This is because the project meets the exemption under this NESHAP for remedial activities conducted at a source that is minor for HAP.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.2.2(a)(i) through 4.2.2(h)(i)
 - B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.7(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.7(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- D. Probable cause of the deviation.
- E. Corrective actions or preventative measures taken.

b. State Reporting

- i. A. Pursuant to Construction Permit# 12010053, the Permittee shall promptly notify the IEPA of deviations of the Soil Vapor Extraction System from requirements set by this permit as follows. These notifications shall provide for each such incident, a description of the incident, the date and duration of the incident, and whether it occurred during startup, malfunction, breakdown, or shutdown.
 - B. Pursuant to Construction Permit# 12010053, the Permittee shall promptly notify the IEPA of failure of the Soil Vapor Extraction System, (including associated control systems) that is accompanied by the direct release of emissions of VOM to the atmosphere within 15 days.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

4.3 Cogeneration Plant - Natural Gas Fired Turbine

1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
Natural Gas Fired Turbine with Dry Low NO _x Combustors	SO ₂ , CO, NO _x , VOM	1990	N/A	None	CPMS

2. Applicable Requirements

For the emission units in Condition 4.3.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act.

a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.
- ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each turbine in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the turbine, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.
- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. Sulfur Dioxide Requirements (SO₂)

- A. NSPS Standards (40 CFR 60 Subparts A and GG)
 - I. Pursuant to 40 CFR 60.1, the provisions of 40 CFR 60 Subpart A apply to the owner or operator.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- II. Pursuant to 40 CFR 60.333(b), no owner or operator shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8,000 ppmw).
- B. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm.
- ii. Compliance Method (SO₂ Requirements)

Monitoring

A. Pursuant to 40 CFR 60.334(h)(3)(i), the Permittee does not need to monitor the total sulfur content of the gaseous fuel combusted in the turbine because the gaseous fuel meets the definition of natural gas in 40 CFR 60.331(u) because the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less as specified in a current, valid purchase contract, tariff sheet, or transportation contract for the gaseous fuel.

Recordkeeping

- B. Pursuant to 40 CFR 60.334(h)(3)(i) and Section 39.5(7)(b), the Permittee shall keep the records of the maximum total sulfur content of the fuel as specified in a current, valid purchase contract, tariff sheet, or transportation contract for the gaseous fuel.
- C. See also Section 5(a).
- c. i. Carbon Monoxide Requirements (CO)
 - A. See also Section 5(b).
- d. i. Nitrogen Oxide Requirements (NO_x)
 - A. Pursuant to 40 CFR 60.332(a)(2), no owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{\left(14.4\right)}{v} + F$$

where:

- STD = allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1)) ${\rm NO_x}$ emission concentration (percent by volume at 15 percent oxygen and on a dry basis).
- Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
- $F = NO_x$ emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(4).

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

ii. Compliance Method (NO_x Requirements)

Testing

- B. Pursuant to Section 39.5(7)(d), the Permittee shall conduct testing on NO_x emissions within 60 months of issuance of this permit and every 60 months thereafter in accordance with 40 CFR 60.335.
- C. Pursuant to 40 CFR 60.335(a) such tests shall be conducted by using either of the following methods: Method 20, ASTM D6522-00 or Method 7E.
- D. Pursuant to Section 39.5(7)(a), the Permittee shall also comply with the requirements in Section 7.1

e. i. Volatile Organic Material Requirements (VOM)

A. See Section 5(a).

f. i. Operational and Production Requirements

- A. Pursuant to Section 39.5(7)(a) of the Act, pipeline quality natural gas shall be the only fuel fired by the turbine.
- B. Pursuant to Construction Permit #13010033, the Permittee shall install and maintain a continuous monitoring system on the cogeneration system for appropriate operating parameter to determine when the turbine is operating in $low-NO_x$ mode.
- ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

A. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the type of fuel fired in the turbine.

g. i. Work Practice Requirements

- A. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any turbine including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the IEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- ii. Compliance Method (Work Practice Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(a) of the Act, at a minimum, the Permittee shall perform monthly inspections of the turbine and associated auxiliary equipment.

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance and repair log. These records shall include, at a minimum: date and time inspections were performed, name(s) of inspection personnel, identification of equipment

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

being inspected, findings of the inspections, operation and maintenance procedures, and a description of any maintenance and repair activities.

3. Non-Applicability Determinations

- a. The turbine is not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Stationary Combustion Turbines, 40 CFR Part 60 Subpart KKKK, because the turbine was constructed prior to February 18, 2005 pursuant to 40 CFR 60.4305(a).
- b. The turbine is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR Part 63 Subpart YYYY, because the turbine is located at an area source of HAP emissions pursuant to 40 CFR 63.6085.
- c. The turbine is not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such unit, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- d. The turbine is not subject to 35 IAC 218.301, because the turbine does not use organic material that would make them subject to 35 IAC 218.301.
- e. The turbine is not subject to 35 IAC 216.121, because the turbine is not a fuel combustion emission units as defined by 35 IAC 211.2470.
- f. The turbine is not subject to 35 IAC 217 Subpart Q because the turbine's potential to emit of NO_x was limited to less than 100 tons/year and, as result, this turbine does not meet applicable criteria of 35 IAC 217.386(a), see Condition 5(a).
- g. The turbine is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the turbine does not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Synthetic Minor Limits

As of the date of issuance of this permit, there are no source-wide synthetic minor limits that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.3.1(a)(i), through 4.3.2(g)(i).
 - B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Reports required by Condition $3.5\,(\mathrm{b})$.
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

4.4 Cogeneration Plant - Natural Gas Fired Duct Burner

1. Emission Units and Operations Pollutants Original Modification/ Air Pollution Monitoring Emission Units Being Construction Reconstruction Control Devices Devices Regulated Date Date or Measures Duct Burner CO, NOx, 1990 2013 None None (34 mmBtu/hr) MOV

2. Applicable Requirements

For the emission unit in Condition 4.4.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act and Section 8.2.

a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.
- ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on the duct burner in accordance with Method 22 for visible emissions at least semi-annually per calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the duct burner, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.
- C. Pursuant to Section 39.5(7)(b) of the Act, if required, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. Carbon Monoxide Requirements (CO)

- A. Pursuant to 35 IAC 216.121, the emissions of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air.
- B. Pursuant to Construction Permit #89030015, see Permit Condition 5(a). [T1]

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

ii. Compliance Method (CO Requirements)

Monitoring

B. Pursuant to Section 39.5(7)(d), the Permittee shall comply with the inspection and tune-up requirements for the duct burner at least annually.

Recordkeeping

- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of CO emissions from the duct burner with supporting calculations (lbs/hour, tons/month, and tons/year).
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of tune-ups containing the following information:
 - The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the duct burner.
 - A description of any corrective actions taken as a part of the tuneup of the duct burner.
 - The type and amount of fuel used over the 12 months prior to the annual tune-up of the duct burner.
- E. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each tune-up and inspections performed along with a maintenance, repair and tune-ups logs. These records shall include, at a minimum:
 - I. Date and time of tune-up or inspections.
 - II. Name(s) of inspection personnel.
 - III. Identification of equipment being inspected.
 - IV. Findings of the inspections.
 - V. Operation and maintenance procedures.
 - Vi. Description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.

c. i. Nitrogen Oxide Requirements (NOx)

- A. Pursuant to Construction Permit #89030015, NO_x emissions from the duct burner shall not exceed 0.1 lb/million Btu heat input to the duct burner.
- ii. Compliance Method (NO_x) Requirements)

Monitoring

A. Pursuant to Section 39.5(7)(d), the Permittee shall comply with the tune-up requirements for the duct burner at least annually, and comply with the requirements specified in Permit Section 8.2.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

Testing

B. Pursuant to Section 39.5(7)(d) of the Act, the Permittee shall conduct testing on $NO_{\rm x}$ emissions by using USEPA Method 7E. Such test shall be conducted within 60 months of issuance of this permit and every 60 months thereafter.

Recordkeeping

C. Pursuant to Section 39.5(7)(a)of the Act, the Permittee shall also comply with the requirements in Section 7.1.

d. i. Volatile Organic Material Requirements (VOM)

A. See Section 5(a).

e. i. Operational or Production Requirements

- A. Pursuant to Construction Permit #89030015 and 40 CFR 60.48c(g)(2), natural gas shall be the only fuel fired in the duct burner.
- ii. Compliance Method (Operational or Production Requirements)

Recordkeeping

B. Pursuant to Section 39.5(7)(b) of the Act, 40 CFR 60.48c(g)(2) and 40 CFR 63.11195(e), the Permittee shall maintain records that natural gas as defined in 40 CFR 63.11237 is the only fuel used in the duct burner.

3. Non-Applicability Determinations

- a. The Duct Burners are not subject to 35 IAC 212.206 and 35 IAC 214.161 because the boilers use natural gas exclusively.
- b. Pursuant to 35 IAC 218.303, because the Duct Burners is a fuel combustion emission unit, the Duct Burners are not subject to 35 IAC Part 218, Subpart G.
- c. Pursuant to 35 IAC 217.141, the Duct Burners with an actual heat input less than 73.2 MW (250 mmBtu/hr) is not subject to 35 IAC 217.141(a) through (c).
- d. The boilers are not subject to 35 IAC 217 Subparts D and E, because each boiler heat input is less than 100 mmBtu/hr.
- e. The boiler is not subject to 35 IAC 217.141 because the heat input of the boiler is less than 250 mmBtu/hr.
- f. The Duct Burner is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because it does not use an add-on control device(s) to achieve compliance with the limitations for any regulated air pollutant.
- g. The Duct Burners is not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD, because the boiler is not located at a major source of HAP emissions.
- h. The Duct Burner is not subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Source, 40 CFR Part 63 Subparts A and JJJJJJ, because the duct burner is gas-fired as defined in 40 CFR 63.11237 pursuant to 40 CFR 63.11195(e).

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007 Date Issued: TBD

Date Issued. I

The Duct Burner is not subject to the New Source Performance Standards (NSPS) Standards i. of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Db, because the Duct Burner heat input is less than 100 mmBtu/hr, pursuant to 40 CFR 60.40b(a).

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act.

Prompt Reporting

- Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly i. Α. notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - Requirements in Conditions 4.4.2(a)(i),(b)(i),(c)(i),(d)(i), and (e)(i)
 - All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- The Permittee shall notify the IEPA, Air Compliance Section, of all other ii. deviations as part of the Semiannual Monitoring Reports required by in Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - Date and time of the deviation.
 - R Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - Probable cause of the deviation.
 - Corrective actions or preventative measures taken. Ε.

b. Federal Reporting

Pursuant to 40 CFR 60.49b(r)(1), the Permittee shall submit reports to i. Α. notify the IEPA, Air Compliance Section, certifying that natural gas, that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period, as part of the Semiannual Monitoring Reports required by in Condition 3.5(b).

BP Naperville Campus I.D. No.: 043065AAG

Date Received: 02/16/2007 Permit No.: 95120161 Date Issued: TBD

4.5 Four Natural Gas Boilers

1. Emission Units and Operations

Emission Units	Pollutants Being Regulated	Original Construction Date	Modification/ Reconstruction Date	Air Pollution Control Devices or Measures	Monitoring Devices
37.8 mmBtu/hr Natural Gas Fired Boiler (#1)	CO, NO _x	1970	None	None	None
Three 87.7 mmBtu/hr Natural Gas Fired Boiler (#2,#3 and #4)	CO, NO _x	1970	None	None	None

2. Applicable Requirements

For the emission units in Condition 4.5.1 above, the Permittee shall comply with the following applicable requirements pursuant to Sections 39.5(7)(a), 39.5(7)(b), and 39.5(7)(d) of the Act and Section 8.2

a. i. Opacity Requirements

- A. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122.
- ii. Compliance Method (Opacity Requirements)

Monitoring

A. Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on each boiler in accordance with Method 22 for visible emissions at least once every calendar year. If visible emissions are observed, the Permittee shall take corrective action within 4 hours of such observation. Corrective action may include, but is not limited to, shut down of the boiler, maintenance and repair and/ or adjustment of fuel usage. If corrective action was taken the Permittee shall perform a follow-up observation for visible emissions in accordance with Method 22. If visible emissions continue, then measurements of opacity in accordance with Method 9 and Section 7.1 shall be conducted within 7 days in accordance with Condition 2.4.

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for each observation for opacity conducted. These records shall include, at a minimum: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, the findings of the observation including the presence of any visible emissions, and a description of any corrective action taken including if the corrective action took place within 4 hours of the observation.
- C. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9.

b. i. Carbon Monoxide Requirements (CO)

A. Pursuant to 35 IAC 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

source with actual heat input greater than 2.9~MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

ii. Compliance Method (CO Requirements)

Monitoring

- A. Pursuant to Section 39.5(7)(d), the Permittee shall comply with the following tune-up requirements for the boiler and conduct such tune-ups at least annually. Each annual tune-up must be conducted no later than 12 months after the previous tune-up:
 - I. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown, but each burner shall be inspected at least once every 12 months).
 - II. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - III. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
 - IV. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
 - V. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

Recordkeeping

- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of tune-ups containing the following information:
 - The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
 - A description of any corrective actions taken as a part of the tuneup of the boiler.
 - The type and amount of fuel used over the 12 months prior to the annual tune-up of the boiler.
- Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records of each inspection performed along with a maintenance, repair log and tune-ups performed. These records shall include, at a minimum:
 - date and time inspections were performed,
 - name(s) of inspection personnel,
 - identification of equipment being inspected,
 - findings of the inspections,

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- operation and maintenance procedures,
- description of all maintenance and repair activities performed including if the activity resulted in a modification or reconstruction of the piece of equipment.
- D. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of CO emissions from the boiler with supporting calculations (lbs/hour, tons/month and tons/year).

c. i. Operational and Production Requirements

- A. Pursuant to Section 39.5(7)(a) of the Act, pipeline quality natural gas shall be the only fuel fired by each boiler.
- ii. Compliance Method (Operational and Production Requirements)

Recordkeeping

- A. Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.11195(e), the Permittee shall maintain records that natural gas as defined in 40 CFR 63.11237 is the only fuel used at these boilers.
- B. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records of the natural gas usage for the boilers with supporting calculations (mmscf/month and mmscf/year).

3. Non-Applicability Determinations

- a. The boilers are not subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Source, 40 CFR Part 63 Subparts A and JJJJJJ, because the boilers are gas-fired boilers as defined in 40 CFR 63.11237 pursuant to 40 CFR 63.11195(e).
- b. The boilers are not subject to the New Source Performance Standards (NSPS) Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Db, because the boilers each have a heat input less than 100 MMBtu/hr. In addition, the boilers were constructed prior to June 19, 1984 and have not been modified or reconstructed since that date.
- c. The boilers are not subject to the New Source Performance Standards (NSPS) Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc, because the boilers were constructed prior to June 9, 1989 and have not been modified or reconstructed since that date.
- d. The boilers are not subject to the National Emission Standards for Hazardous Air Pollution (NESHAP) for National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heat, 40 CFR Part 63 Subpart DDDDD, because the source is not located at a major source of HAPs.
- e. The boilers are not subject to 35 IAC 212.206 and 35 IAC 214.161 because the boilers use natural gas exclusively.
- f. Pursuant to 35 IAC 218.303, because these are the fuel combustion emission units, the boilers are not subject to 35 IAC Part 218, Subpart G.
- g. The boilers are not subject to 35 IAC 217.141 because the heat input of the boilers are less than 250 mmBtu/hr.
- h. The boilers are not subject to 35 IAC 217 Subparts D and E, because the heat input of each boiler is less than 100 mmBtu/hr.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

i. The boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

4. Other Requirements

As of the date of issuance of this permit, there are no other requirements that need to be included in this Condition.

5. Reporting Requirements

The Permittee shall submit the following information pursuant to Section 39.5(7)(f) of the Act. Addresses are included in Attachment 3.

a. Prompt Reporting

- i. A. Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the IEPA, Air Compliance Section, within 30 days of deviations from applicable requirements as follows unless a different period is specified by a particular permit provision, i.e., NSPS or NESHAP requirement:
 - I. Requirements in Conditions 4.5.2(a)(i) through 4.5.2(d)(i).
 - B. All such deviations shall be summarized and reported as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- ii. The Permittee shall notify the IEPA, Air Compliance Section, of all other deviations as part of the Semiannual Monitoring Report required by Condition 3.5(b).
- iii. The deviation reports shall contain at a minimum the following information:
 - A. Date and time of the deviation.
 - B. Emission unit(s) and/or operation involved.
 - C. The duration of the event.
 - D. Probable cause of the deviation.
 - E. Corrective actions or preventative measures taken.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Section 5 - Additional Title I Requirements

This section is reserved for Title I requirements not specified in Sections 3 or 4.

a. i. Construction Permit 13010033 Requirements [T1]

A. Pursuant to Construction Permit #13010033, emissions from the turbine and duct burner combined, shall not exceed the following limits: [T1]

	VOM		PM _{2.5}		SO ₂
Lb/hr	Tons/year	Lb/hr	Tons/year	Lb/hr	Tons/year
0.9	3.6	1.0	4.3	0.25	1.1

- B Pursuant to Construction Permit #13010033, pipeline quality natural gas usage for the turbine and duct burner shall not exceed 280 mm scf/month and 1,167 mm scf/year.
- ii. Compliance Method (Construction Permit 13010033)

Monitoring

A. Pursuant to Construction Permit #13010033, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) and 30-day rolling average basis.

Testing

B. See Section 4 for testing requirements of individual groups of emission units.

Recordkeeping

- C. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep emissions from the turbine and duct burner combined, monthly and annual records of VOM, $PM_{2.5}$ and SO_2 emitted with supporting calculations (lbs/hour, lbs/month, tons/year).
- D. Pursuant to Section 39.5(7)(a), the Permittee shall keep the records of the natural gas combusted (mmscf/mo and mmscf/yr).

b. i. Construction Permit 89030015 Requirements [T1]

A. Pursuant to Construction Permit #89030015, emissions from the turbine and duct burner combined, shall not exceed the following limits: [T1]

CO		NO_x			
Lb/hr	Tons/year	ISO Standard	Lb/hr	Tons/year	ISO Standard
		ppm			ppm
20	95	77	20	92	49

ii. Compliance Method (Construction Permit 89030015) [T1]

Monitoring

- A. Pursuant to Section 39.5(7)(d), the Permittee shall comply with the tune-up requirements for the turbine and conduct such tune-ups at least biennial or at the frequencies required by a manufacturer.
- B. See Condition 4.1.2(g)(ii) for inspection requirements.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

A. Pursuant to Construction Permit #89030015, compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) and 30-day rolling average basis.

Testing

- D. Pursuant to Section 39.5(7)(d), the Permittee shall conduct testing on CO, emissions within 60 months of issuance of this permit and every 60 months thereafter, the congeneration unit shall be tested by using USEPA Method 10 or USEPA approved method,
- E. Pursuant to Section 39.5(7)(a), the Permittee shall also comply with the requirements in Section 7.1.

Recordkeeping

- F. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep emissions from the turbine and duct burner combined, monthly and annual records of NO_x , and CO emitted with supporting calculations.(ppm, lbs/hour, lbs/month, tons/year).
- G. Pursuant to Section 39.5(7)(b), the Permittee shall keep the records of tune-up activities performed.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 6 - Insignificant Activities Requirements

1. Insignificant Activities Subject to Specific Regulations

Pursuant to 35 IAC 201.210 and 201.211, the following activities at the source constitute insignificant activities. Pursuant to Sections 9.1(d) and 39.5(6)(a) of the Act, the insignificant activities are subject to specific standards promulgated pursuant to Sections 111, 112, 165, or 173 of the Clean Air Act. The Permittee shall comply with the following applicable requirements:

	Number of	
Insignificant Activity	Units	Insignificant Activity Category
Gas turbines and stationary reciprocating internal combustion engines < 112 kW (150 HP).	1	35 IAC 201.210(a)(15)
Gas Turbines and Engines between 112 KW and 1,118 KW (150 and 1,500 HP) that are emergency or standby units.	7	35 IAC 201.210(a)(16)

a. Applicable Requirements

Pursuant to Sections 39.5(7) (a), 39.5(7) (b), and 39.5(7) (d) of the Act, the Permittee shall comply with the following applicable requirements when required by the indicated subpart in addition to the applicable requirements in Condition 6.4:

i. New Source Performance Standard Requirements (NSPS)

- A. Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII)
 - I. Pursuant to 40 CFR 60.4205(b) and 60.4202(a)(2), the engines are subject to the emission limitations of 40 CFR 89.112 and 89.113.
 - II. The engines shall meet the applicable general provisions of 40 CFR 60 Subpart A. See Condition 7.2(b).
 - III. The engines shall comply with the applicable emission limitations and operating limitations, fuel requirements, general compliance requirements, testing and initial compliance requirements, continuous compliance requirements, notifications, reports, and records and other requirements and information of 40 CFR 60 Subpart IIII and 40 CFR 89 Subpart B.
- B. Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60 Subpart JJJJ)
 - I. The engines shall meet the emission limitation requirements of 40 CFR 60.4233.
 - II. The engines shall meet the applicable general provisions of $40\ \text{CFR}\ 60\ \text{Subpart A.}$ See Condition 7.2(a).
 - III. The engines shall comply with the applicable emission limitations and operating limitations, fuel requirements, general compliance requirements, testing and initial compliance requirements, continuous compliance requirements, notifications, reports, and records and other requirements and information of 40 CFR 60 Subpart JJJJ.

ii. National Emission Standards for Hazardous Air Pollutants (NESHAP)

A. Standards of Performance for Stationary Reciprocating Internal Combustion Engines (40 CFR 60 Subpart ZZZZ)

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- I. Pursuant to 40 CFR 63.6590(a)(1)(iii) and 40 CFR 63.6590(b)(3)(viii), the existing engines do not have to meet the requirements of this subpart and of subpart A including initial notification requirements.
- II. Pursuant to 40 CFR 63.6590(a)(1)(iii) and 40 CFR 60.6590(c), new engines must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines.

Number of

2. Insignificant Activities in 35 IAC 201.210(a)

In addition to any insignificant activities identified in Condition 6.1, the following additional activities at the source constitute insignificant activities pursuant to 35 IAC 201.210 and 201.211:

Insignificant Activity	Number of Units	Insignificant Activity Category
Wastewater Pretreatment facility	1	35 IAC 201.210(a)(1) and 201.211
Spent Solvent Bulk Loading Operations Fume Hood	1	35 IAC 201.210(a)(1) and 201.211
Storage tanks < 10,000 gallon with annual throughput < 100,000 gallon (not storing gasoline or any material listed as a HAP).	3	35 IAC 201.210(a)(10)
Storage tanks of virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oil.	2	35 IAC 201.210(a)(11)
Any size storage tanks containing exclusively soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions where an organic solvent has not been mixed.	7	35 IAC 201.210(a)(17)

3. Insignificant Activities in 35 IAC 201.210(b)

Pursuant to 35 IAC 201.210, the source has identified insignificant activities as listed in 35 IAC 201.210(b)(1) through (28) as being present at the source. The source is not required to individually list the activities.

4. Applicable Requirements

Insignificant activities in Conditions 6.1 and 6.2 are subject to the following general regulatory limits notwithstanding status as insignificant activities. The Permittee shall comply with the following requirements, as applicable:

- a. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122, except as provided in 35 IAC 212.123(b).
- b. Pursuant to 35 IAC 212.321 or 212.322 (see Conditions 7.2(a) and (b)), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceed the allowable emission rates specified 35 IAC 212.321 or 212.322 and 35 IAC Part 266.
- c. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm, except as provided in 35 IAC Part 214.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- d. Pursuant to 35 IAC 218.301, no person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission source, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material.
- e. Pursuant to 35 IAC 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 250 gal, unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the IEPA according to 35 IAC Part 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2). Exception as provided in 35 IAC 218.122(c): If no odor nuisance exists the limitations of 35 IAC 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F.
- f. Pursuant to 35 IAC 218.182, for each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182, except as provided in 35 IAC 218.181.

5. Compliance Method

Pursuant to Section 39.5(7)(b) of the Act, the source shall maintain records of the following items for the insignificant activities in Conditions 6.1 and 6.2:

- a. List of all insignificant activities, including insignificant activities added as specified in Condition 6.6, the categories the insignificant activities fall under, and supporting calculations as needed for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).
- b. Potential to emit emission calculations before any air pollution control device for any insignificant activities listed in 35 IAC 201.210(a)(1) through (3).

6. Notification Requirements for Insignificant Activities

The source shall notify the IEPA accordingly to the addition of insignificant activities:

a. Notification 7 Days in Advance

- i. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(1) and 201.211 and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3. The notification shall include the following pursuant to 35 IAC 201.211(b):
 - A. A description of the emission unit including the function and expected operating schedule of the unit.
 - B. A description of any air pollution control equipment or control measures associated with the emission unit.
 - C. The emissions of regulated air pollutants in lb/hr and ton/yr.
 - D. The means by which emissions were determined or estimated.
 - E. The estimated number of such emission units at the source.
 - F. Other information upon which the applicant relies to support treatment of such emission unit as an insignificant activity.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

- ii. Pursuant to 35 IAC 201.212(b), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a)(2) through 201.210(a)(18) and is not currently identified in Conditions 6.1 or 6.2, a notification to the IEPA Permit Section 7 days in advance of the addition of the insignificant activity is required. Addresses are included in Attachment 3.
- iii. Pursuant to Sections 39.5(12)(a)(i)(b) and 39.5(12)(b)(iii) of the Act, the permit shield described in Section 39.5(7)(j) of the Act (see Condition 2.7) shall not apply to any addition of an insignificant activity noted above.

b. Notification Required at Renewal

Pursuant to 35 IAC 201.212(a) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(a) and is currently identified in Conditions 6.1 or 6.2, a notification is not required until the renewal of this permit.

c. Notification Not Required

Pursuant to 35 IAC 201.212(c) and 35 IAC 201.146(kkk), for the addition of an insignificant activity that would be categorized under 35 IAC 201.210(b) as describe in Condition 6.3, a notification is not required.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 7 - Other Requirements

1. Testing

- a. Pursuant to Section 39.5(7)(a) of the Act, a written test protocol shall be submitted at least sixty (60) days prior to the actual date of testing, unless it is required otherwise in applicable state or federal statutes. The IEPA may at the discretion of the Compliance Section Manager (or designee) accept protocol less than 60 days prior to testing provided it does not interfere with the IEPA's ability to review and comment on the protocol and does not deviate from the applicable state or federal statutes. The protocol shall be submitted to the IEPA, Compliance Section and IEPA, Stack Test Specialist for its review. Addresses are included in Attachment 3. This protocol shall describe the specific procedures for testing, including as a minimum:
 - i. The name and identification of the emission unit(s) being tested.
 - ii. Purpose of the test, i.e., permit condition requirement, IEPA or USEPA requesting test.
 - iii. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
 - v. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
 - vi. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. Include if emission tests averaging of 35 IAC 283 will be used.
 - vii. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
 - viii. Any proposed use of an alternative test method, with detailed justification. This shall be included as a waiver of the test procedures. If a waiver has already been obtained by the IEPA or USEPA, then the waiver shall be submitted.
 - ix. Sampling of materials, QA/QC procedures, inspections, etc.
- b. The IEPA, Compliance Section shall be notified prior to these tests to enable the IEPA to observe these tests pursuant to Section 39.5(7)(a) of the Act as follows:
 - i. Notification of the expected date of testing shall be submitted in writing a minimum of thirty (30) days prior to the expected test date, unless it is required otherwise in applicable state or federal statutes.
 - ii. Notification of the actual date and expected time of testing shall be submitted in writing a minimum of five (5) working days prior to the actual date of the test. The IEPA may at its discretion of the Compliance Section Manager (or designee) accept notifications with shorter advance notice provided such notifications will not interfere with the IEPA's ability to observe testing.
- c. Copies of the Final Report(s) for these tests shall be submitted to the IEPA, Compliance Section within fourteen (14) days after the test results are compiled and finalized but

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

no later than ninety (90) days after completion of the test, unless it is required otherwise in applicable state or federal statutes or the IEPA may at the discretion of the Compliance Section Manager (or designee) an alternative date is agreed upon in advance pursuant to Section 39.5(7)(a) of the Act. The Final Report shall include as a minimum:

- i. General information including emission unit(s) tested.
- ii. A summary of results.
- iii. Discussion of conditions during each test run (malfunction/breakdown, startup/shutdown, abnormal processing, etc.).
- iv. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
- v. Detailed description of test conditions, including:
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption.
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
 - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
- vi. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- vii. An explanation of any discrepancies among individual tests or anomalous data.
- viii. Results of the sampling of materials, QA/QC procedures, inspections, etc.
- ix. Discussion of whether protocol was followed and description of any changes to the protocol if any occurred.
- x. Demonstration of compliance showing whether test results are in compliance with applicable state or federal statutes.
- d. Copies of all test reports and other test related documentation shall be kept on site as required by Condition 2.5(b) pursuant to Section 39.5(7)(e)(ii) of the Act.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

2. Emissions Reduction Market System (ERMS) Requirements

- Pursuant to 35 IAC Part 205, ERMS seasonal emissions of VOM during the seasonal allotment a. period from May 1 through September 30 shall not exceed 10 tons/year.
- Pursuant to 35 IAC 205, the Permittee shall maintain the following records to allow the b. confirmation of actual VOM emissions during the seasonal allotment period:
 - Records of operating data and other information for each individual emission unit i. or group of related emission units at the source, as specified in Sections 3 and 4of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period.
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 3 and 4 of this permit.
 - Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- Pursuant to 35 IAC Section 205.150(c), in the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

BP Naperville Campus I.D. No.: 043065AAG

Date Received: 02/16/2007 Permit No.: 95120161 Date Issued: TBD

3. 40 CFR 60 Subpart A Requirements (NSPS)

a. 40 CFR 60 Subpart A and Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Pursuant to 40 CFR 60 Subpart A and **Subpart IIII**, the Permittee shall comply with the following applicable General Provisions when required by Subpart IIII as indicated:

General Provision	General Provision		
Citation	Applicable?	Subject of Citation	Explanation (if required)
40 CFR 60.1	Yes	General Applicability of the General Provisions	
40 CFR 60.2	Yes	Definitions	Additional terms defined in 40 CFR 60.4219
40 CFR 60.3	Yes	Units and Abbreviations	
40 CFR 60.4	Yes	Address	
40 CFR 60.5	Yes	Determination of Construction or Modification	
40 CFR 60.6	Yes	Review of Plans	
40 CFR 60.7	Yes	Notification and Recordkeeping	Except that 40 CFR 60.7 only applies as specified in 40 CFR 60.4214(a).
40 CFR 60.8	Yes	Performance Tests	Except that 40 CFR 60.8 only applies to stationary CI ICE with a displacement of (230 liters per cylinder and engines that are not certified.
40 CFR 60.9	Yes	Availability of Information	
40 CFR 60.10	Yes	State Authority	
40 CFR 60.11	No	Compliance with Standards and Maintenance Requirements	Requirements are specified in subpart IIII.
40 CFR 60.12	Yes	Circumvention	
40 CFR 60.13	Yes	Monitoring Requirements	Except that 40 CFR 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
40 CFR 60.14	Yes	Modification	
40 CFR 60.15	Yes	Reconstruction	
40 CFR 60.16	Yes	Priority List	
40 CFR 60.17	Yes	Incorporations by Reference	
40 CFR 60.18	No	General Control Device Requirements and Work Practice Requirements	
40 CFR 60.19	Yes	General Notification and Reporting Requirements	

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

b. 40 CFR 60 Subpart A and GG

Pursuant to 40 CFR 60 Subpart A and Subpart GG, the Permittee shall comply with the following applicable General Provisions when required by Subpart GG as indicated:

General	General		
Provision	Provision		_ , , , , , , , , , , , , , , , , , , ,
Citation	Applicable?	Subject of Citation	Explanation (if required)
40 CFR 60.1	Yes	General Applicability of the General Provisions	
40 CFR 60.2	Yes	Definitions	
40 CFR 60.3	Yes	Units and Abbreviations	
40 CFR 60.4	Yes	Address	
40 CFR 60.5	Yes	Determination of Construction or Modification	
40 CFR 60.6	Yes	Review of Plans	
40 CFR 60.7	Yes	Notification and Recordkeeping	
40 CFR 60.8	Yes	Performance Tests	
40 CFR 60.9	Yes	Availability of Information	
40 CFR 60.10	Yes	State Authority	
40 CFR 60.11	Yes	Compliance with Standards and Maintenance Requirements	
40 CFR 60.12	Yes	Circumvention	
40 CFR 60.13	Yes	Monitoring Requirements	
40 CFR 60.14	Yes	Modification	
40 CFR 60.15	Yes	Reconstruction	
40 CFR 60.16	Yes	Priority List	
40 CFR 60.17	Yes	Incorporations by Reference	
40 CFR 60.18	Yes	General Control Device Requirements and Work Practice Requirements	
40 CFR 60.19	Yes	General Notification and Reporting Requirements	

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

4. Malfunction Breakdown Requirements

a. Malfunction Breakdown Provisions

Pursuant to 35 IAC 201.149, 201.261, and 201.262, the source is authorized to continue operation in violation of the applicable requirements (as referenced in Section 4.1 of the CAAPP permit) during malfunction or breakdown. The source has applied for such authorization in its application, generally describing "such continued operation is necessary to prevent injury to persons or severe damage to equipment; or that such continued operation is required to provide essential services; provided, however, that continued operation solely for the economic benefit of the source shall not be sufficient for granting of permission." As provided by 35 IAC 201.265, authorization in this CAAPP permit for continued operation during malfunction or breakdown does not shield the source from enforcement for any violation of applicable emission standard(s) that occurs during malfunction or breakdown and only constitutes a prima facie defense to such an enforcement action provided that the source has fully complied with all terms and conditions connected with such authorization.

- i. Upon continued operation in violation of the applicable requirements during malfunction or breakdown, the source shall as soon as practical, remove from service and repair the emission unit(s) or undertake other measures as described in the application so that any violation of the applicable requirements cease.
- ii. For continued operation in violation of the applicable requirements during malfunction or breakdown, the time shall be measured from the start of a particular incident and ends when violation of the applicable requirements ceases. The absence of a violation of the applicable requirements for a short period shall not be considered to end the incident if a violation of the applicable requirements resume. In such circumstances, the incident shall be considered to continue until corrective measures are taken so that a violation of the applicable requirements cease or the source takes the emission unit(s) out of service.
- iii. Following notification to the IEPA of continued operation in violation of the applicable requirements during malfunction or breakdown, the source shall comply with all reasonable directives of the IEPA with respect to such incident, pursuant to 35 IAC 201.263.

b. Monitoring - Recordkeeping

Pursuant to Section 39.5(7)(b) of the Act and 35 IAC 201.263, the source shall maintain records of continued operation in violation of the applicable requirements during malfunction or breakdown shall include at a minimum:

- i. A malfunction breakdown plan that includes the following at a minimum:
 - A. Estimate of typical opacity during malfunction or breakdown.
 - B. Estimates of typical emissions during malfunction or breakdown.
 - C. Reasonable steps that will be taken to minimize emissions, duration, and frequency of malfunction or breakdown.
- ii. Date and duration of the malfunction or breakdown.
- iii. A detailed explanation of the malfunction or breakdown.
- iv. An explanation why the emission unit(s) continued operation.
- v. The measures used to reduce the emissions and the duration of the event.
- vi. The steps taken to prevent similar malfunctions or breakdowns and reduce their frequency and severity.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

vii. An explanation of whether emissions during malfunction or breakdown were above typical emissions in the malfunction or breakdown procedures and whether emissions exceeded any applicable requirements.

c. Monitoring - Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act and 35 IAC 201.263, the source shall provide the following notification and reports to the IEPA, Compliance Section and Regional Field Office (addresses are included in Attachment 3) concerning continued operation in violation of the applicable requirements during malfunction or breakdown:

i. Prompt Reporting

When continued operation in violation of the applicable requirements during malfunction or breakdown:

- A. The source shall notify the IEPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.
- B. Upon achievement of compliance, the source shall give a written follow-up notice within 15 days to the IEPA, Air Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the source to minimize and correct deficiencies with chronology, and when the repairs were completed or when the unit(s) was taken out of service.
- C. If compliance is not achieved within 5 working days of the occurrence, the source shall submit interim status reports to the IEPA, Air Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the emission unit(s) will be taken out of service.

ii. Semiannual Reporting

As part of the required Semiannual Monitoring Reports, the source shall submit a semiannual malfunction breakdown report including the following at a minimum:

- A. A listing of all malfunctions and breakdowns, in chronological order, that includes: the date, time, and duration of each incident; and identity of the affected operation(s) involved in the incident.
- B. Dates of the notices and reports required by Prompt Reporting requirements of 7.4(c) (i) above.
- C. The aggregate duration of all incidents during the reporting period.
- D. If there have been no such incidents during the reporting period, this shall be stated in the report.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007

Section 8 - State Only Requirements

Pollutant

1. Permitted Emissions for Fees

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 2.3(e), not considering insignificant activities as addressed by Section 6, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

1011464116		IOND/ ICAL
Volatile Organic Material	(MOV)	29.84
Sulfur Dioxide	(SO ₂)	3.99
Particulate Matter	(PM)	13.78

Particulate Matter	(PM)	13.78
Nitrogen Oxides	(NO_x)	274.88
HAP, not included in VOM or PM	(HAP)	
	Total	322.49

2. NO_x RACT Requirements

a. i. Natural Gas Fired Boilers and Duct Burner (See also Section 4.4 and 4.5)

A. Pursuant to 35 IAC 217.164, no person shall cause or allow emissions of NO_x into the atmosphere from any industrial boiler to exceed the following limitations, on and after January 1, 2015.

	Emission Unit Type and Rated Heat	${ m NO_x}$ Emissions
Fuel	Input Capacity (mmBtu/hr)	Limitation (lb/mmBtu)
Natural Gas	Industrial boiler less than or equal to 100	Combustion tuning
	equal to 100	

Tons/Year

B. Monitoring

I. Pursuant to 35 IAC 217.166 and IAC 217.152(a), the owner or operator of an industrial boiler subject to the combustion tuning requirements of Section 35 IAC 217.164 must have combustion tuning performed on the boiler at least annually, starting January 1, 2015. The combustion tuning must be performed by an employee of the owner or operator or a contractor who has successfully completed a training course on the combustion tuning of boilers firing the fuel or fuels that are fired in the boiler.

C. Recordkeeping

- I. Pursuant to 35 IAC 217.156(a)through (j), the owner or operator of the boiler must maintain records that demonstrate compliance with the requirements of 35 IAC 217 Subpart D and E, which include, but are not limited to:
 - A. The owner or operator of an emission unit subject to 35 IAC 217.152, must keep and maintain all records used to demonstrate initial compliance and ongoing compliance with the requirements of 35 IAC 217.152. Such records must be kept at the source and maintained for at least five years and must be available for immediate inspection and copying by the IEPA.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Date Received: 02/16/2007
Date Issued: TBD

Date Issued. II

- B. The owner or operator of the boiler subject to 35 IAC 217 Subpart E, must maintain records that demonstrate compliance with the requirements, as applicable, that include the following:
 - Identification, type (e.g., gas-fired), and location of each unit.
 - Calendar date of the record.
 - Monthly, seasonal, and annual operating hours.
 - Type and quantity of each fuel used monthly, seasonally, and annually.
 - Product and material throughput, as applicable.
 - ${}^{\blacksquare}$ Reports for all applicable emissions tests for ${\rm NO}_{\rm x}$ conducted on the unit, including results.
 - The date, time, and duration of any startup, shutdown, or malfunction in the operation of any emission unit subject to Subpart E, or any emissions monitoring equipment. The records must include a description of the malfunction and corrective maintenance activity.
 - ${}^{\blacksquare}$ A log of all maintenance and inspections related to the unit's air pollution control equipment for NO_x that is performed on the unit.
 - ${\tt A}$ log for the ${\rm NO}_{\rm x}$ monitoring device, if present, including periods when not in service and maintenance and inspection activities that are performed on the device.
 - Identification of time periods for which operating conditions and pollutant data were not obtained by the continuous emissions monitoring system, including the reasons for not obtaining sufficient data and a description of corrective actions taken.
 - The owner or operator of an industrial boiler subject to 35 IAC 217 Subpart E must maintain records in order to demonstrate compliance with the combustion tuning requirements under 35 IAC 217.166.
- C. Pursuant to 35 IAC 217.166 (a) through (e), the owner or operator must maintain the following records that must be made available to the Illinois EPA upon request:
 - The date the combustion tuning was performed;
 - The name, title, and affiliation of the person who performed the combustion tuning;
 - Documentation demonstrating the provider of the combustion tuning training course, the dates the training course was taken, and proof of successful completion of the training course;

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

- Tune-up procedure followed and checklist of items (such as burners, flame conditions, air supply, scaling on heating surface, etc.) inspected prior to the actual tune-up; and
- Operating parameters recorded at the start and at conclusion of combustion tuning.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Attachment 1 - List of Emission Units at This Source

Section	Emission Units	Description
4.1	Pilot-Scale Process Units and Associated 700 Tank Farm	The Permittee operates five pilot-scale process units for experimental research in Building 702. Storage tanks in the tank farm are be used for storing and blending of feedstocks for the process units. Emissions from this equipment are controlled with a control train consisting of an $\rm H_2S$ scrubber (S-702) and a natural gas-fired thermal oxidizer (TC-702).
4.2	Soil vapor extraction system	The system is used for a soil remediation project at the former Amoco site which handled and stored trichloroethylene at the source. The US Army operated a Nike Missile Battery Control and Housing Area in this area prior to Amoco operations. Vapor extraction wells apply a vacuum to the contaminated soil within this area with selected wells periodically used for air injection to promote air flow. Extracted vapor and the vapor discharge of the air stripper are ducted to a carbon adsorption system to control emissions of volatile organic material (VOM). When remediation begins, multiple drums of carbon may be used in series to control the VOM.
4.3	Cogeneration System - Natural Gas Fired Turbine	These units form a cogeneration system that provides electricity and steam for the research and development facility. The heat input capacity of the
4.4	Cogeneration System - Natural Gas Fired Duct Burner	turbine is 93.5 million Btu per hour and the capacity of the duct burner is 34 million Btu per hour.
4.5	Four Natural Gas Fired Boilers	Steam is produced by the boilers for heating the buildings. The heat input capacity for Boiler 1 is 37.8 million Btu/hr and the other boilers are each 87.7 million Btu/hr and have economizers.

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Attachment 2 - Acronyms and Abbreviations

acfm	Actual cubic feet per minute	
ACMA	Alternative Compliance Market Account	
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]	
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711	
ATU	Allotment trading unit	
BACT	Best Available Control Technology	
BAT	Best Available Technology	
Btu	British Thermal Units	
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]	
CAAPP	Clean Air Act Permit Program	
CAIR	Clean Air Interstate Rule	
CAM	Compliance Assurance Monitoring	
CEMS	Continuous Emission Monitoring System	
CFR	Code of Federal Regulations	
CISWI	Commercial Industrial Solid Waste Incinerator	
СО	Carbon monoxide	
CO ₂	Carbon dioxide	
COMS	Continuous Opacity Monitoring System	
CPMS	Continuous Parameter Monitoring System	
dscf	Dry standard cubic foot	
dscm	Dry standard cubic meter	
ERMS	Emissions Reduction Market System	
°F	Degrees Fahrenheit	
GHG	Green house gas	
GACT	Generally Acceptable Control Technology	
gr	Grains	
HAP	Hazardous air pollutant	
Hg	Mercury	
HMIWI	Hospital medical infectious waste incinerator	
hp	Horsepower	
hr	Hour	
H ₂ S	Hydrogen sulfide	
I.D. No.	Identification number of source, assigned by IEPA	
IAC	Illinois Administrative Code	
ILCS	Illinois Compiled Statutes	
IEPA	Illinois Environmental Protection Agency	
kw	Kilowatts	
LAER	Lowest Achievable Emission Rate	
lbs	Pound	

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

m	Meter	
MACT	Maximum Achievable Control Technology	
М	Thousand	
MM	Million	
mos	Month	
MSDS	Material Safety Data Sheet	
MSSCAM	Major Stationary Sources Construction and Modification (Non-attainment New Source Review)	
MW	Megawatts	
NESHAP	National Emission Standards for Hazardous Air Pollutants	
NO_x	Nitrogen oxides	
NSPS	New Source Performance Standards	
NSR	New Source Review	
PB	Lead	
PEMS	Predictive Emissions Monitoring System	
PM	Particulate matter	
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods	
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods	
ppm	Parts per million	
ppmv	Parts per million by volume	
ppmw	Parts per million by weight	
PSD	Prevention of Significant Deterioration	
PSEU	Pollutant-Specific Emission Unit	
psia	Pounds per square inch absolute	
PTE	Potential to emit	
RACT	Reasonable Available Control Technology	
RMP	Risk Management Plan	
scf	Standard cubic feet	
SCR	Selective catalytic reduction	
SIP	State Implementation Plan	
SO ₂	Sulfur dioxide	
Т1	Title I - identifies Title I conditions that have been carried over from an existing permit	
T1N	Title I New - identifies Title I conditions that are being established in this permit	
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit	
USEPA	United States Environmental Protection Agency	
VOM	Volatile organic material	

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Attachment 3 - Contact and Reporting Addresses

IEPA Compliance Section	Illinois EPA, Bureau of Air Compliance & Enforcement Section (MC 40) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Phone No.: 217/782-2113
IEPA Stack Test Specialist	Illinois EPA, Bureau of Air Compliance Section Source Monitoring - Third Floor 9511 Harrison Street Des Plaines, Illinois 60016 Phone No.: 847/294-4000
IEPA Air Quality Planning Section	Illinois EPA, Bureau of Air Air Quality Planning Section (MC 39) 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Phone No.: 217/782-2113
IEPA Air Regional Field Operations Regional Office #1	Illinois EPA, Bureau of Air Regional Office #1 9511 Harrison Street Des Plaines, Illinois 60016 Phone No.: 847/294-4000
IEPA Permit Section	Illinois EPA, Bureau of Air Permit Section (MC 11) 1021 North Grand Avenue East P.O. Box 19506 Springfield, Illinois 62794-9506 Phone No.: 217/785-1705
USEPA Region 5 - Air Branch	USEPA (AR - 17J) Air and Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604 Phone No.: 312/353-2000

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161

Attachment 4 - Example Certification by a Responsible Official

SIGNATURE BLOCK			
NOTE: THIS CERTIFICATION MUST BE SIGNED BY A RESPONSIBLE OFFICIAL. APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED AS INCOMPLETE.			
I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION CONTAINED IN THIS APPLICATION ARE TRUE, ACCURATE AND COMPLETE. ANY PERSON WHO KNOWINGLY MAKES A FALSE, FICTITIOUS, OR FRAUDULENT MATERIAL STATEMENT, ORALLY OR IN WRITING, TO THE ILLINOIS EPA COMMITS A CLASS 4 FELONY. A SECOND OR SUBSEQUENT OFFENSE AFTER CONVICTION IS A CLASS 3 FELONY. (415 ILCS 5/44(H)) AUTHORIZED SIGNATURE:			
BY:			
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY		
	//		
TYPED OR PRINTED NAME OF SIGNATORY	DATE		

BP Naperville Campus I.D. No.: 043065AAG Permit No.: 95120161